

CLAIMS

1. A method for treating an inflammation in skin of a patient, comprising irradiating the skin with infrared (IR) radiation in a first wavelength band and with violet/blue light in a second wavelength band.
2. The method according to claim 1, wherein the first wavelength band is selected to cause dilation of blood vessels in a vicinity of the inflammation, and wherein irradiating the skin with the violet/blue light comprises applying the violet/blue light to the inflammation while the blood vessels are dilated.
3. The method according to claim 2, wherein irradiating the skin comprises irradiating the skin with the IR radiation and the violet/blue light simultaneously.
4. The method according to claim 2, wherein irradiating the skin comprises irradiating the skin with the IR radiation and the violet/blue light sequentially.
5. The method according to claim 1, wherein the first wavelength band is in the range 800-980 nm, and the second wavelength band is in the range 405-450 nm.
6. The method according to claim 5, wherein the first wavelength band is in the range 850-900 nm.
7. The method according to claim 1, wherein irradiating the skin comprises irradiating the skin with at least 4 mW/cm² of the violet/blue light and at least 1 mW/cm² of the IR radiation.
8. The method according to claim 7, wherein irradiating the skin comprises irradiating the skin with at least 20

mW/cm² of the violet/blue light and at least 8 mW/cm² of the IR radiation.

9. The method according to claim 1, wherein irradiating the skin comprises irradiating the skin continuously for at least one minute.

10. The method according to claim 1, wherein irradiating the skin comprises irradiating the skin with pulsed radiation.

11. The method according to claim 1, wherein irradiating the skin comprises irradiating the skin using a single radiation source, which emits both the violet/blue light and the IR radiation.

12. The method according to claim 11, wherein the single radiation source comprises a discharge lamp containing metal halide materials selected to radiate in the first and second wavelength bands.

13. The method according to claim 1, wherein irradiating the skin comprises irradiating the skin using an array of solid-state radiation sources.

14. The method according to claim 1, wherein irradiating the skin comprises treating a condition selected from a group of conditions consisting of skin aging, ulcers, edema, rosacea, chronic cutaneous inflammatory conditions and acne.

15. The method according to claim 14, and comprising applying a medicated cream to the skin in conjunction with irradiating the skin.

16. The method according to claim 1, wherein irradiating the skin comprises irradiating the skin using a radiation source that is in contact with the skin.
17. Apparatus for treating an inflammation in skin of a patient, comprising at least one radiation source, which is adapted to irradiate the skin with infrared (IR) radiation in a first wavelength band and with violet/blue light in a second wavelength band.
18. The apparatus according to claim 17, wherein the first wavelength band is selected to cause dilation of blood vessels in a vicinity of the inflammation, and wherein irradiating the skin with the violet/blue light comprises applying the violet/blue light to the inflammation while the blood vessels are dilated.
19. The apparatus according to claim 18, wherein the at least one radiation source is adapted to irradiate the skin with the IR radiation and the violet/blue light simultaneously.
20. The apparatus according to claim 18, wherein the at least one radiation source is adapted to irradiate the skin comprises irradiating the skin with the IR radiation and the violet/blue light sequentially.
21. The apparatus according to claim 17, wherein the first wavelength band is in the range 800-980 nm, and the second wavelength band is in the range 405-450 nm.
22. The apparatus according to claim 21, wherein the first wavelength band is in the range 850-910 nm.
23. The apparatus according to claim 17, wherein the at least one radiation source is adapted to irradiate the

skin with at least 4 mW/cm² of the violet/blue light and at least 1 mW/cm² of the IR radiation.

24. The apparatus according to claim 23, wherein the at least one radiation source is adapted to irradiate the skin with at least 20 mW/cm² of the violet/blue light and at least 9 mW/cm² of the IR radiation.

25. The apparatus according to claim 17, wherein the at least one radiation source is adapted to irradiate the skin continuously for at least one minute.

26. The apparatus according to claim 17, wherein the at least one radiation source is adapted to irradiate the skin with pulsed radiation.

27. The apparatus according to claim 17, wherein the at least one radiation source comprises a single radiation source, which emits both the violet/blue light and the IR radiation.

28. The apparatus according to claim 27, wherein the single radiation source comprises a discharge lamp containing metal halide materials selected to radiate in the first and second wavelength bands.

29. The apparatus according to claim 28, wherein the metal halide materials comprise gallium and cesium halides.

30. The apparatus according to claim 17, wherein the at least one radiation source comprises a plurality of radiation sources.

31. The apparatus according to claim 30, and comprising an adjustable bracket, on which the radiation sources are

mounted, so as to allow a relative angular orientation of the radiation sources to be adjusted.

32. The apparatus according to claim 31, wherein the bracket is adjustable so as to direct at least two of the
5 radiation sources to irradiate a common region of the skin, and so as to direct the at least two of the radiation sources to irradiate different regions of the skin.

33. The apparatus according to claim 30, wherein the
10 plurality of radiation sources comprises an array of solid-state radiation sources, comprising first radiation sources, which emit the radiation in the first wavelength band, and second radiation sources, which emit the radiation in the second wavelength band.

15 34. The apparatus according to claim 33, wherein the solid-state radiation sources are selected from a group of sources consisting of light-emitting diodes (LEDs) and laser diodes.

35. The apparatus according to claim 34, wherein the
20 first radiation sources comprise at least one of GaAs and GaAlAs diodes, while the second radiation sources comprises at least one of GaN, SiN, InSiN, and SiC diodes.

36. The apparatus according to claim 17, wherein the at
25 least one radiation source comprises a spectral filter, for blocking ultraviolet (UV) radiation generated by the at least one radiation source.

37. The apparatus according to claim 17, wherein the at least one radiation source comprises a forced air cooling

device for cooling the skin that is irradiated by the at least one radiation source.

38. The apparatus according to claim 17, wherein the at least one radiation source is adapted to be placed in
5 contact with the skin.

39. A lamp, comprising:

an envelope, which is at least partly transparent;

an excitation circuit, which is coupled to the lamp so as excite an electrical discharge within the envelope;

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a gas and metal mixture, contained within the envelope, which is adapted, upon excitation of the electrical discharge by the excitation circuit, to emit both narrowband infrared (IR) radiation in a first
15 wavelength band and narrowband violet/blue light in a second wavelength band.

40. The lamp according to claim 39, wherein the first wavelength band is in the range 800-980 nm, and the second wavelength band is in the range 405-450 nm.

20 41. The lamp according to claim 40, wherein the first wavelength band is in the range 850-910 nm.

42. The lamp according to claim 39, wherein the gas mixture comprises metal halide materials selected to radiate in the first and second wavelength bands.

25 43. The lamp according to claim 42, wherein the metal halide materials comprise gallium and cesium halides.

44. The lamp according to claim 39, wherein the gas mixture further comprises mercury.

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45. The lamp according to claim 38, wherein the excitation circuit comprises electrodes, which are spaced a predetermined distance apart within the envelope.